[FIG.1]

CELL A

CELL B

5 [FIG.2]

FREQUENCY

CELL A

CELL B

TIME

10 COLLISION OF HOPPING PATTERNS

[FIG.3]

QUALITY

QUALITY DETERIORATION DUE TO COLLISION

15 SYMBOL

[FIG.4]

100 OFDM RECEPTION APPARATUS

101 RECEPTION RF SECTION

- 20 104 PILOT RECEPTION POWER MEASURING SECTION
 - 105 DATA SECTION RECEPTION POWER MEASURING SECTION

PILOT/DATA POWER RATIO INFORMATION

106 DATA SECTION RECEPTION POWER PREDICTION SECTION

- 107 POWER COMPARISON SECTION
- 25 COLLISION POSITION INFORMATION
 - 103 ERROR CORRECTING/DECODING SECTION
 - 108 COLLISION POSITION DETECTION SECTION

DECODED DATA

HOPPING PATTERN INFORMATION

[FIG.5]

POWER

5 POWER INCREASE DUE TO COLLISION SYMBOL

[FIG.6]

POWER

10 SYMBOL

POWER DECREASE DUE TO COLLISION

[FIG.7]

OTHER CELL SIGNAL

15 OWN CELL SIGNAL
RECEIVED SIGNAL
ACTUAL RECEPTION POWER

RECEPTION POWER PREDICTED FROM PILOT

20 [FIG.8]

OWN CELL SIGNAL

OTHER CELL SIGNAL

RECEIVED SIGNAL

ACTUAL RECEPTION POWER

25 RECEPTION POWER PREDICTED FROM PILOT

[FIG.9]

200 OFDM RECEPTION APPARATUS

- 101 RECEPTION RF SECTION
- 104 PILOT RECEPTION POWER MEASURING SECTION
- 105 DATA SECTION RECEPTION POWER MEASURING SECTION PILOT/DATA POWER RATIO INFORMATION
- 5 106 DATA SECTION RECEPTION POWER PREDICTION SECTION
 - 103 ERROR CORRECTING/DECODING SECTION
 - COLLISION POSITION INFORMATION
 - 107 POWER COMPARISON SECTION
 - 201 ERROR RATE CALCULATION SECTION
- 10 202 THRESHOLD CONTROL SECTION

THRESHOLD

108 COLLISION POSITION DETECTION SECTION

DECODED DATA

HOPPING PATTERN INFORMATION

15

[FIG. 10]

- 300 OFDM RECEPTION APPARATUS
- 101 RECEPTION RF SECTION
- 104 PILOT RECEPTION POWER MEASURING SECTION
- 20 105 DATA SECTION RECEPTION POWER MEASURING SECTION
 - PILOT/DATA POWER RATIO INFORMATION
 - 106 DATA SECTION RECEPTION POWER PREDICTION SECTION
 - 301 RECEPTION AVERAGE SIR DETCTION SECTION
 - 107 POWER COMPARISON SECTION
- 25 302 TABLE SECTION
 - 103 ERROR CORRECTING/DECODING SECTION

COLLISION POSITION INFORMATION

THRESHOLD

108 COLLISION POSITION DETECTION SECTION
DECODED DATA
HOPPING PATTERN INFORMATION

5 [FIG.11]

PERFORMANCE (ERROR RATE)

BAD

GOOD

SMALL

10 LARGE

THRESHOLD

[FIG.12]

- 400 OFDM RECEPTION APPARATUS
- 15 101 RECEPTION RF SECTION
 - 104 PILOT RECEPTION POWER MEASURING SECTION
 - 105 DATA SECTION RECEPTION POWER MEASURING SECTION
 - 401 RECEPTION AVERAGE SIR DETECTION SECTION

PILOT/DATA POWER RATIO INFORMATION

- 20 106 DATA SECTION RECEPTION POWER PREDICTION SECTION
 - 402 TABLE CREATION SECTION
 - 103 ERROR CORRECTING/DECODING SECTION

COLLISION POSITION INFORMATION

- 107 POWER COMPARISON SECTION
- 25 403 ERROR RATE CALCULATION SECTION
 - 404 THRESHOLD CONTROL SECTION

THRESHOLD

108 COLLISION POSITION DETECTION SECTION

DECODED DATA
HOPPING PATTERN INFORMATION